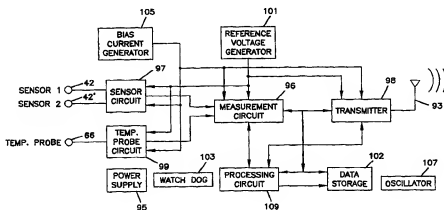




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A61B 5/00		A1	(11) International Publication Number: WO 99/56613
			(43) International Publication Date: 11 November 1999 (11.11.99)
(21) International Application Number: PCT/US99/01229			
(22) International Filing Date: 21 January 1999 (21.01.99)			
(30) Priority Data: 09/070,677 30 April 1998 (30.04.98) US			
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 09/070,677 (CON) Filed on 30 April 1998 (30.04.98)			
(71) Applicant (for all designated States except US): E. HELLER & COMPANY [US/US]; 1360 South Loop Road, Alameda, CA 94502 (US).			
(72) Inventors; and (75) Inventors/Applicants (for US only): SAY, James [US/US]; 2800 Pearl Harbor, Alameda, CA 94501 (US). TOMASCO, Michael, F. [US/US]; 22528 Poppy Drive, Cupertino, CA 95015 (US). HELLER, Adam [US/US]; 5317 Valbum Circle, Austin, TX 78731 (US). GAL, Yoram [IL/IL]; P.O. Box 126, 30065 Kibbutz Yagur (IL). ARIA, Behrad [US/US]; 817 Santa Clara Avenue, Alameda, CA 94502 (US). HELLER, Ephraim [US/US]; 44 Stark Knoll			
(74) Agent: DAIGNAULT, Ronald, A.; Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., 3100 Northwest Center, 90 South Seventh Street, Minneapolis, MN 55402-4131 (US).			
(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).			
Published With international search report.			

(54) Title: ANALYTE MONITORING DEVICE AND METHODS OF USE



(57) Abstract

An analyte monitor (40) includes a sensor (42), a sensor control unit (44), and a display unit (48). The sensor (42) has, for example, a substrate (50), a recessed channel (54) formed in the substrate, and conductive material (52) disposed in the recessed channel to form a working electrode (58). The sensor control unit (44) typically has a housing (45) adapted for placement on skin and is adapted to receive a portion of an electrochemical sensor (42). The sensor control unit (44) also includes two or more conductive contacts (80) disposed on the housing (45) and configured for coupling to two or more contact pads (49) on the sensor. A transmitter (98) is disposed in the housing and coupled to the plurality of conductive contacts for transmitting data obtained using the sensor. The display unit (48) has a receiver (150) for receiving data transmitted by the transmitter of the sensor control unit and a display (154) coupled to the receiver for displaying an indication of a level of an analyte. The analyte monitor (40) may also be part of a drug delivery system to alter the level of the analyte based on the data obtained using the sensor.

